

Lawrence Livermore National Laboratory

Integrated Safety Management Recertification at LLNL

presented to

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Integrated Safety Management Provides the Framework for Continuous Improvement



Safety Conscious Work Environment

Integrated Safety Management System

Integrated Management System

Developing an Integrated Management System

Assumption 1: Safety/security & compliance = productivity

Assumption 2: Silos suboptimize productivity

Assumption 3: Security blanket in silos but false security

- | | |
|-------|---|
| Basis | Different approaches to similar work create institutional confusion <ul style="list-style-type: none">• Culture of LLNL was “teams of teams” to provide mission focus and flexibility• “Teams of teams” can lead to silos• Silos are expensive and create confusion at the worker level |
|-------|---|



LLNL Transition Challenges

- Transition combined two distinct cultures with LSO/HQ objectives



Incumbent Team

- If it isn't broken, don't fix it
- Are you committed to the Lab or just passing through?
- Can't change until you fully understand how we are unique
- Nonprofit
- Work Smart Standards

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Incumbent Team

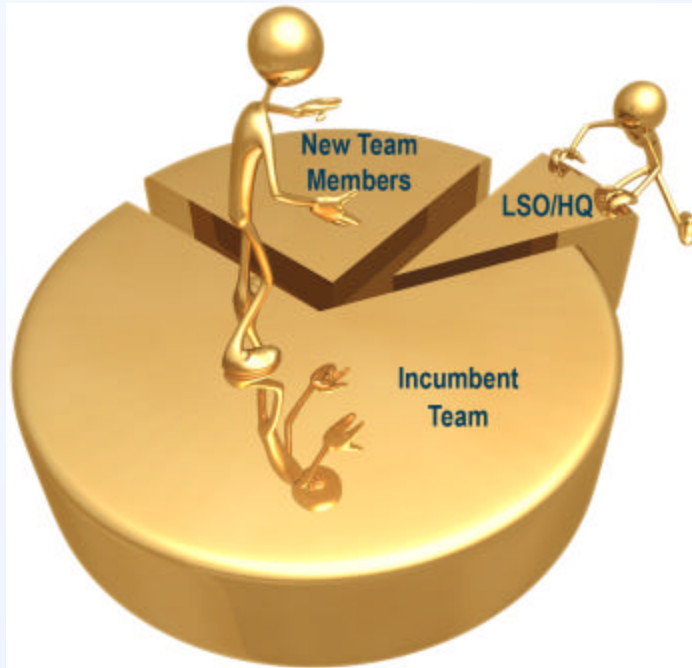
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New Team Members

- On a mission
- Clear contractual incentive to change
- Corporate mandate to change
- “Change is healthy” paradigm
- For profit
- Appendix G. A & B

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LSO/HQ Objectives

- Better value
- More integration—sometimes very specific
- Systems that allow oversight versus micromangement = transparency

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Integrated Culture and Management System

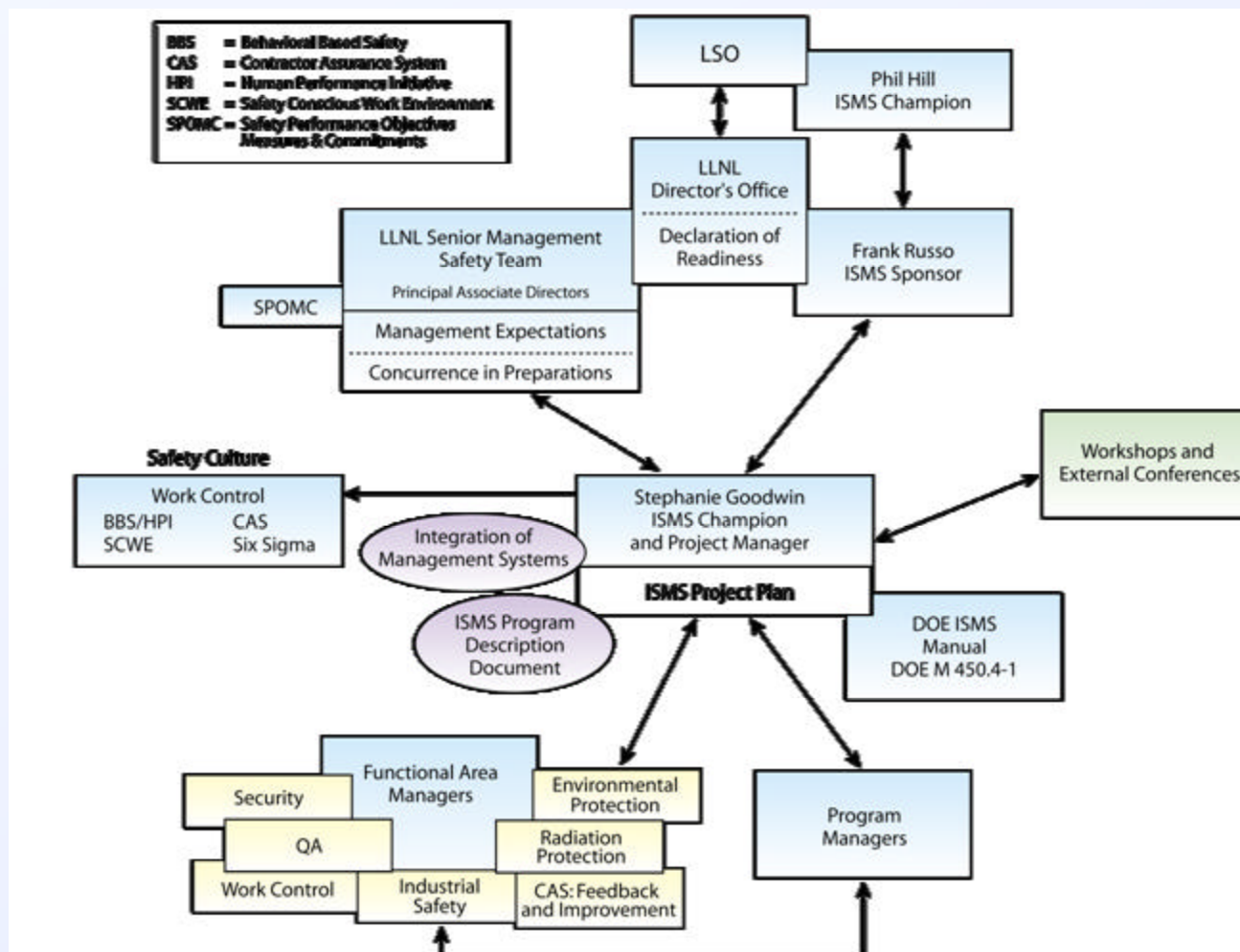


Integrating Systems for Recertification

- To get ISMS right, all management systems require integration – not solely safety
- Each DOE site evolved to individual models: some very integrated and others somewhat silo'd
- Each model had a purpose but funding pressure has driven a single purpose: higher value
- For ISMS recertification, new contractors must first verify that all underlying systems are functional and ready to be fully integrated



LLNL ISMS Implementation Structure



Lessons Learned to Achieve ISM

- Safety is only one element of systems integration. Systems integration must also include other elements including the following:
 - Quality
 - EVMS
 - Work control
 - Security
 - Conduct of engineering, operations, and maintenance
 - Contractor assurance
 - Functional management
- Timelines for recertification need to be established based on maturity of each individual element as opposed to picking a milestone date



LLNL Functional Areas

Budget, Finance, & Accounting
Business Services
Conduct of Maintenance*
Conduct of Operations*
Conduct of Research & Development*
Construction*
Contract Management
Contractor Assurance
Emergency Management
Environmental Protection*
Facility Engineering
Facility Management & Support Systems*
Information Technology
Internal Audits & Oversight
Legal
Material Distribution

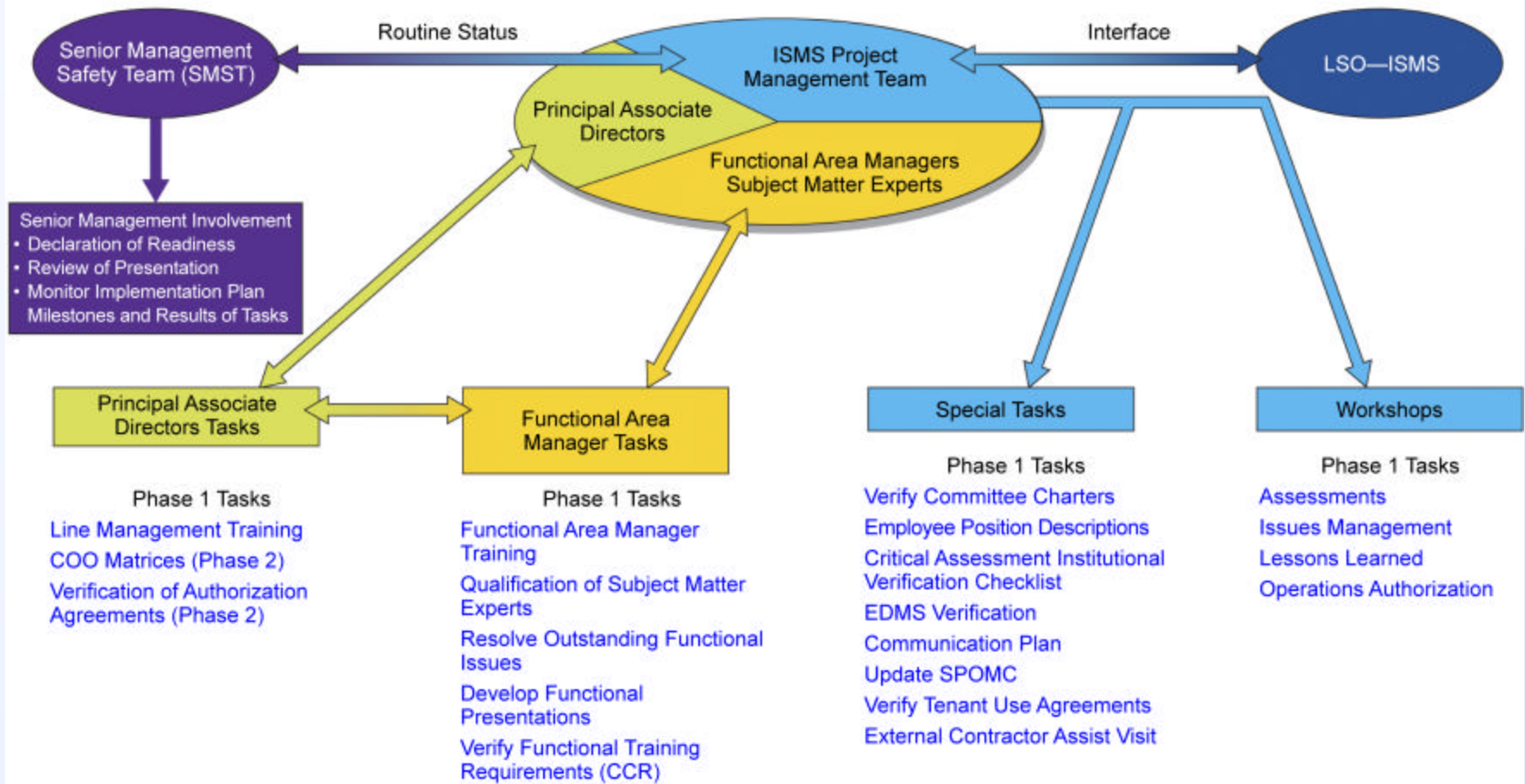
Nuclear Operations*
Occupational Medicine
Packaging & Transportation*
Procurement
Project Management*
Property Management
Public Affairs
Quality Assurance*
Radiation Protection*
Safeguards & Security*
Site Restoration*
Strategic Human Capital Management
Training & Qualification
Waste Management*
Worker Safety & Health

*Functional Areas that perform under an institutional work control process tailored to the hazards inherent in the work.



LLNL ISMS Recertification Process

ISMS Nucleus Team



The Path Forward

- Functional versus administrative matrix
- Blend views of established incumbent team with views of new team members
- Recognize where we are and build a plan to meet IMS, not just ISMS
 - Budget realities
 - Organizational constraints
 - Maturity of systems

